

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A water spreader arrangement for an evaporative cooler, said arrangement comprising when in situ:

5 a water entry point upstream of a substantially vertical first projection projecting from a substantially horizontal surface, such that said projection divides a water stream into two parts having a predetermined ratio of flow rates therebetween,

10 a plurality of further projections arranged on a substantially horizontal level or levels downstream of said horizontal surface, and wherein each further projection divides each part water stream impinging thereon into two further parts having a predetermined ratio of flow rates therebetween.

2. A water spreader arrangement as claimed in claim 1, wherein said water entry point comprises a well upstream of said first projection such that the velocity of the water stream contacting said first projection is generally horizontal.

15 3. A water spreader arrangement as claimed in claim 1 or 2, wherein each said substantially horizontal level is at a decline to the horizontal from the substantially horizontal surface.

20 4. A water spreader arrangement as claimed in any one of the preceding claims, wherein an additional projection is positioned approximately symmetrically of each part water stream at the most downstream position of the arrangement, and further wherein each additional projection is higher than 4 mm and wider than 5 mm.

5. A water spreader arrangement as claimed in any one of the preceding claims, wherein each predetermined ratio of flow rates is 1:1.

25 6. A water spreader system incorporating a plurality of water spreader arrangements as claimed in any one of the preceding claims, wherein said arrangements are located in the top surface of an evaporative cooler lid.

7. A water spreader system incorporating a plurality of water spreader arrangements as claimed in any one of claims 1-4, wherein the system is formed as a single piece.

30 8. A method of spreading water in an evaporative cooler, comprising feeding a water stream to a water spreader arrangement whereby said water is divided into a plurality of partial streams at a plurality of levels from a first level having one vertical projection for dividing the stream into two partial streams as the stream impinges on the one

projection, and wherein the two partial streams are further divided by further projections at the plurality of levels downstream of the first level.

9. A method as claimed in claim 7, wherein the water spreader arrangement is as claimed in any one of claims 1-4.

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10. A method as claimed in claim 7 or 8, comprising a plurality of said water spreader arrangements.